AIR COMMAND AND STAFF COLLEGE

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JOINT LOGISTICS MANAGEMENT COMMAND: WHICH SERVICE IS BETTER

by

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Preface

Logistics is the lifeblood to our armed forces. Logistics has and will continue to be vital to the successful planning and executing US war strategy. Logistics must be responsive, flexible, and precise. It should encompass the full spectrum from deployment to redeployment, reconstitution, forward deployment, while at the same time enhancing combat effectiveness and readiness of our forces. Recent historical examples like Desert Shield/Storm proved how vitally important logistical operations are to achieve success. In this paper, we will take a close look at how the Joint Force Commander supports a campaign. We will also suggest a method of transforming theater logistics into a single organization. This generic organization will be adaptive to any theater of operations and have sole responsibility for planning and executing joint logistics in support of a Joint Force Commander.

Joint Publication 4-0, Doctrine for Logistic Support of Joint Operations, is the primary joint publication providing combatant commanders and military planners with guidance on the conduct of logistics support during joint operations. This document outlines the Army, Air Force, Navy, and Marine Corp logistical capabilities and their contribution to a theater of operation. This document further addresses the need for a joint logistics command to support the needs of the Joint Force Commander in a theater. The Joint Force Commander must consider many issues when planning logistical support

of a campaign involving US Forces and in some cases, coalition forces. Unfortunately, current doctrine does not designate a lead service to plan and provide the logistical support to forces in a theater of operation

Abstract

The success or failure of any military campaign is directly related to the effectiveness and efficiency of the logistics support provided to the warfighter. Dr. Martin van Creveld said it best, "logistics make up as much as nine-tenths of the business of war" and that "the proportion of logistical support is a rough indicator of an army's efficiency—a low proportion representing a high efficiency." Throughout military history, vital strategic decisions that led to victory or defeat have been influenced by important logistics considerations of how to sustain military operations, i.e. fix, arm, feed, and move. Because of downsizing and having to do more with less, military services are now forced to operate jointly during contingencies. Under the terms of the Goldwater-Nichols Act of 1986, the combatant commanders (Theater CINC's) can exercise directive authority over subordinate service component commanders for logistics to meet theater operational requirements. This requirement, as outlined in Joint Publication 4-0, has paved the way for support activities to be conducted on a joint basis, as opposed to the previous stovepiped, single-service requirement basis. Additionally, Joint Vision 2010 outlines and defines Focused Logistics as the way the services will do business in the future. Focus Logistics is described as "the imperative of technological advantage, the need for faster, more reliable and integrated logistics systems, and instilling confidence in the warfighter that critical supplies will be in the right place, at the right time, and in the right quantity. The key components of the definition are getting supplies to the right place, the right time and the right quantity. For a Joint Task Force commander, who is best suited to take on this task of providing the logistical support of US forces committed to an operational contingency. All of the services bring unique and critical capabilities to the fight. We anticipate in future military operations around the world, our forces will likely be committed with short notice to potentially hostile and austere environments and for unknown duration. For these reasons, logistics support must be streamlined to build an effective system, thus eliminating duplication of effort or the building "iron mountains" to sustain the warfighting troops. The problem we will address is which service is best suited and capable of providing command and control over support of a theater operational contingency.

Introduction

Joint and Multinational Logistics Support: Which Service is the Best?

Logistics is the bridge connecting a nation's economy to a nation's warfighting forces. It is the process of planning and executing the movement and sustainment of operating forces in the execution of a military strategy and operation.¹ It is the foundation of combat power. According to Joint Publication 4-0, combatant commanders exercise directive authority for logistics. Joint Logistics is a complex, interdependent concept that can apply leverage (plus or minus) to a combatant commander's combat power. Good logistics, when applied operationally, can be a force multiplier, a deterrent, and a contributor to flexibility. History has shown that logistic support in joint and multinational operations traditionally have been the responsibility of each participating The Services, under the guidance of their departmental Secretaries, are Service. responsible for their logistics functions as outlined in DOD Directive 5100.1. However, new circumstances require that the United States investigates a number of fundamental issues with the military and how the Services operate as a team during contingencies. The most important issue that must be dealt with, from a joint perspective, has to do with joint logistics. More and better logistics planning and execution is needed to deal with the various contingencies confronting our nation and military. Recent deployments and

operations have clearly demonstrated the lack of continuity between the services. These flaws were uncovered in the planning and execution by the services during these contingencies. Joint Publication 4-0, the primary document for doctrine for logistic support during joint operations, provides the fundamental principles for joint and multinational operations support. The Service's poor coordination, insufficient planning and general lack of supervision over operations caused redundancy, duplication of effort and unnecessary competition for scarce assets. These issues have caused us to look closely at our logistical concepts. Addressing and correcting these issues has resulted in a fundamental rethinking of the entire logistics architecture. Several new concepts have been developed to address the problems. One concept, collective or joint logistics, however, allows a theater commander during a contingency to use limited resources more efficiently. At the operational level, the theater commander may direct cross servicing, where the cost of support is reimbursed. He can also direct common servicing logistics, where expenses are not reimbursed. Lastly, he can direct joint servicing, where expenses are shared by the services. In the joint Services case, the theater commander may direct Service components to support the joint force with particular logistic functions. This can be based on a Service being the dominant user or the most capable provider of a function or functions. An example of this would be an Army Support Command supporting Marine or Air Force units for common service items. Additionally, a joint force commander must be able to integrate the logistic functions of the participating Services and collaborating nations alike. Several exercises in the recent past were used to test the Services' capability to operate in a joint environment. Some on these exercises included such operations as Joint Logistics-Over-The-Shore Operations (JLOT), cross-service agreements, and executive-agency assignment in particular functional areas. Servicing arrangements not only provide financial savings by reducing redundancy, they also can enhance our force mobility while simplifying the overall organization by minimizing the support infrastructure we must establish in-theater. To take advantage of joint and multinational logistic capabilities, each service should adopt standardized policies and procedures, uniform standards, common terminology, and a free exchange of information at all levels of commands. This will enhance the logistic support we receive and can provide in joint operations.

Notes

¹ Joint Publication 4-0, Doctrine for Logistic Support of Joint Operations, 1995

J4 Perspective on Joint Theatre Logistics Management

Lessons learned from recent major operations have identified the need to integrate a logistics management process that provides a unified focus and optimizes support of deployed forces. Limited logistics resources and increased joint operations in nonlinear battle space with widely dispersed units make it imperative to capitalize on the assets/capabilities available in-theater to facilitate support to the warfighter. The joint theater management concept was designed to optimize resources by synchronizing all material support efforts in theater with the objective to timely provide the assets required for joint force mission accomplishment. The process allows the integration of logistics capabilities of the whole joint force to achieve joint mission goals while maximizing potential savings and reducing the logistics footprint. The Joint Theater Logistics Management process heavily relies on improved communications and essential enabling technologies such as Joint Total Asset Visibility (JTAV), Global Combat Support System (GCSS), In-transit Visibility, and the automated information systems to eliminate redundancy and excess capabilities. Additionally, it brings together the aforementioned technologies with Theater Distribution; Joint Reception, Staging, Onward Movement and Integration (JRSOI); and other joint concepts to fulfill the common user and cross Service support mission. It also melds available strategic, operational and tactical skills

and knowledge to ensure connectivity to all levels of logistics is enhanced. A set common standard of support helps achieve economies when making allocation distribution decisions and consolidating like functions. As future operations continue to challenge the flexibility and responsiveness of our logistical train, we must ensure that common items and skills in limited supply are allocated/distributed in a manner that satisfies the highest priority requirements necessary to accomplish the joint theater mission.

US Navy Logistics

What capabilities can the US Navy bring in support of a major theater war. Historically, Navy operators haven't worried much about logistics outside of supporting themselves. Basically, there were two reasons why they didn't worry; (1) the Navy deploys its ships with inherently robust logistics capabilities and (2) deployed Naval forces are supported in war and peace in the same manner. As a matter of fact, when national leaders call upon naval forces in times of crisis, they look for both responsiveness and staying power. Forward deployed naval forces carry with them initial sustainment stocks to support operations and they are supported by an in-place logistics system, which constantly flows material and logistic support. During these contingency operations, the Navy just opens the valve to this logistics pipeline a little wider. Continuous logistic support by that pipeline is critical during the initial stages of a crisis, to support potential long-term operations. However, just as the rest of the Department of Defense community is struggling with declining budgets and increased OPTEMPO requirements, Navy logisticians must now worry about sustainment more than in the past, primarily focusing on cost. The Navy, like all of the other services, has had to learn to live within the boundaries of funding constraints while maintaining the operational and combat readiness at the highest possible level.

"Victory is won or lost in battle, but all military history shows that adequate logistic support is essential to the winning of battles."

— Dan A. Kimball, Secretary of the Navy, 1952

The military might of the United States is dependent upon our ability to project power decisively. But power projection is more than striking from a distance. It must include an ability to sustain the forces that will conduct and exploit those strikes. When looking at naval power projection, it includes the application of offensive force against an enemy at a chosen time and place and includes dynamic Navy specific logistical support system. For the Navy, their support system extends from the leading edge of engagement all the way back to our national industrial bases and worldwide sources of raw material. Their logistical system is specific to their needs and those of the US Marines. Generally, when Marines land across the beach, they know that complete stocks positioned for the operation will contain all the materiel they may need until long-term sustainment is established, and the health-services system that attended to their routine needs is ready for casualty response. Naval logistics is an integrated system that supports day-one readiness, and provides substantial initial and continuous sustainment through a responsive logistic pipeline that taps into the industrial might of the United States.

Warfighting and support of the warfighter have become increasingly complex as we near the 21st century. With the ever more sophisticated hardware to support and dwindling dollars available to maintain support, Navy logistician jobs are more difficult. Because of these unparalleled challenges, coupled with the CJCS Joint Vision 2010 concept of Focused Logistics, the Navy developed its Expeditionary Logistics concept.² The Navy emphasize support that is forward and sea-based in character; a pipeline of

support systems to ensure that the **Navy** is equipped and ready. Seeking to enhance its logistics capabilities, Navy logistics relies on four cornerstones, which supports their overall contingency planning. The four cornerstones are precision, information, transformation, and partnership. Through precision, the Navy's aim is to operate with less and not build up massive inventories as in the past. This is not only the Navy's nemesis; it has been true with all services. In order to do this, logistics response time will have to be reduced. Additionally, utilizing an aggressive and more precise asset visibility-tracking program will contribute to the overall logistic effort and offer logistics as an enabler.

The Navy is very good at sea based logistics, but when it comes to expeditionary (land) based logistics, their ability in providing this kind of sustainment is minimal. Navy's expeditionary logistics capability is focused on six functional areas. The six functional areas of naval logistics are supply, transportation, maintenance, engineering, health service, and other services.³ All of these functional areas are important for theater logistics, but for the purpose of this study, we will focus primarily on the supply, transportation, and maintenance functional areas. These three areas are defined the same by all services. The supply function includes the receipt, storing, issue, and re-supply of material for conduct of operations. Transportation includes the movement of units, personnel, equipment, and supplies from the point of origin to the final destination. It involves deploying and sustaining forces. Maintenance functions include those actions necessary to preserve, repair, and ensure continued operation and effectiveness of organizational equipment and weapon systems. So really what can the Navy do to support a logistics effort in a joint operational environment. The answer is basically a

simple one. The Navy does not possess the capability to lead a joint or multinational effort providing logistics support to a theater. Besides the traditional uses of Navy vessels, like getting major equipment and materials to the fight, the Navy's primary logistics role is sustaining itself and elements of Marine Corp forces. Navy logistics is designed to provide direct logistics support to ships and other units of the fleet.

Notes

 ¹ Naval Doctrine Publication 4, Naval Logistics, 1995
 ² Navy International Logistics Symposium, "Expeditionary Logistics," 1997
 ³ Naval Doctrine Publication 4, Naval Logistics, 1995

US Army Logistics

The Army has both operational and support responsibilities. The Army's primary role during any contingency is to equip, maintain, and logistically sustain Army forces for their operational missions. In crisis situations, Army combat service support elements may be rapidly deployed to a distant theater. In this event, the Army Service Component Commander (ASCC) may initially have some of its elements located in theater and the remainder awaiting transportation. Typically, the theater organization will be austere at the outset and gradually develop over time. Due to constrained strategic transportation, forces are prioritized into the theater. This may mean the only transportation support initially available to forces that arrive early is that which is organic to the force [e.g., a corps support command (COSCOM)] or that host nation support (HNS) provides. In this contingency, it is likely that the ASCC would form a tailored support package and deploy it as soon as possible to assist in supporting the corps. In established theaters, much of the combat power and support are forward deployed. Accordingly, the state of maturity at the start of the conflict is high, and it can reach full development relatively fast.

The established support for a theater is provided by the Theater Army Area Command.¹ Each theater has one, normally adequately staffed and fully operational. For example, the 21st TAACOM, US Army Europe (USAREUR), is fully operational and has

a day-to-day mission. Others like the 22d TAACOM, US Army Central Command (USARCENT) was an ad-hoc organization put together to support Desert Shield/Storm using active and reserve component forces. When supporting major contingency operations, an Army corps will probably be the force used. Doctrinally, an Army corps is the smallest organization capable of sustaining itself for long periods of time. If forces within a theater do not grow any larger than a corps, then only TAACOM liaison cells will be deployed to provide coordination with the TAACOM. As the theater forces grow larger than corps operations, then Echelons Above Corps (EAC) units begin providing support to the corps. During the deployment process, the TAACOM builds its forces in conjunction with the corps forces. Once the size of the operation exceeds that of a corps, the TAACOM forms the nucleus for CSS operations and becomes the command and control (C2) element between the corps and the overall joint command. The handoff of support responsibilities between corps and the TAACOM will depend on the tactical situation and support missions. After the handoff, the corps will focus its support efforts only on corps units. The CSS base may also start with existing TAACOM headquarters elements and EAC units in conjunction with corps units.

The TAACOM is organized to support deployed US Army forces and if required other US Services and allies. This is important when looking at what the Army support capability will be in future operations. The TAACOM has four missions. Its first mission is to support units located in or passing through its assigned area. These include personnel and finance support, direct support maintenance (DSM), all classes of supply (less classified maps and class VIII), field services, and local transportation. Movement control, line-haul transportation, and communications security (COMSEC) are not

included. The TAACOM's second mission is to provide the combat zone (CZ) with specified logistic support and maintenance support to the theater supply system under the theater army materiel management center's (TAMMC's) workload direction. Thirdly, the TAACOM coordinates area-related functions (such as circulation and population control) with Host Nation (HN) elements, and supervises and coordinates real property maintenance activities (RPMAs) with the engineer command (ENCOM) through its Area Support Groups (ASG). The TAACOM's fourth mission is rear operations within its assigned area. The number of TAACOMs assigned to a theater depends on the size of the theater expressed in terms of the force in the theater, workload, and geographic area. The TAACOM will be comprised of only those units required to provide support. The types and number of subordinate units depend on the number and composition of corps and units within the COMMZ.

Surely, future operations will be joint and combined. During these contingency operations where the CINC and his staff is deployed, part of the TAACOM headquarters will deploy to provide the appropriate command and control for theater CSS operations. The TAACOM will usually deploy a forward element to get a quick command and control element on location with the CINC and his staff. This small staff will initially perform all command and control functions of the standard TAACOM staff. This small staff should deploy with elements of the CSS units they will command during the contingency. Also, staff positions requiring joint liaison personnel should be identified and commitments made from other Services for those personnel to support the operation. The joint liaison or staff is critical for the success in a joint theater of operations. The Army is normally responsible for the COMMZ and locates the HQ and most CS and CSS

elements there. There are two types of organizations within the COMMZ to accomplish the support mission: area and functional commands. Area commands are established by assigning geographic responsibilities to TAACOMs. TAACOMs normally subdivide their areas and assign geographic responsibilities to area support groups (ASGs). The functional commands provide support on an area basis as well; however, they do not have geographic responsibilities.

Army support units must be flexible enough to tailor its support capabilities based on requirements and priorities the commander establishes. The CSS capabilities at echelons above corps (EAC) must support units in and passing through the communications zone (COMMZ) and absorb the logistic requirements for those that are beyond the corps' capability or capacity. In contingency operations, the absence of a support infrastructure in the theater may result in a different form of territorial organization that does not initially include establishing a COMMZ. In this situation, initial forces deployed to the theater would operate in the CZ and would receive support directly into forward support areas. This support may be projected forward from the CONUS bases; directly via air lines of communication (ALOC) and sea lines of communication (SLOC); or, preferably, from land and sea support bases in or adjacent to the theater. The ASCC would coordinate the aerial ports of debarkation (APOD) and sea ports of debarkation (SPOD) and phase appropriate support elements into the theater to accomplish mission requirements. As the buildup continues and EAC organizations are created, decisions are made as to the necessity of establishing a COMMZ. A COMMZ's designation and subsequent geographic development depend on the area requirements, the forces to be supported, the scope of operations, and the theater's projected expansion. Once the decision to establish the COMMZ has been made, the ASCC normally develops it.

Command relationships are theater-unique and contingent upon the situation, mission, and forces available.

The TAACOM ASG is a logistic HQ in the COMMZ that commands and controls assigned units and attached units. Its mission is determined based on assessing the CSS needs of units operating in the theater. An ASG's organization and specific missions vary over time as the battlefield changes. Its mission is to:

- ❖ Command, control, and supervise all assigned and attached units.
- Provide general support maintenance (GSM) to support the theater supply system.
- Provide GS supply (less medical and ammunition) to units in the theater of operations.
- Manage and coordinate HNS that replaces or augments portions of the ASG support mission.
- ❖ Plan and direct providing direct support (DS) supply, maintenance, and field services (less medical, ammunition, and centralized personnel and administration services) to units located in or passing through its assigned zone.
- Control and coordinate physical security and rear operations within its area of the COMMZ.
- Plan and coordinate the location or relocation of units within the ASG area.
- Coordinate area-related functions with HN elements, and supervise and coordinate RPMA with ENCOM through its ASGs.

The ASG typically consists of maintenance battalions, supply and service (S&S) battalion and petroleum supply battalion. The number and types of units comprising an ASG depend on the number and makeup of units in the theater.

Notes

¹ Department of the Army Pamphlet 525-5, Chapter 3, Combat Service Support

US Air Force Logistics

The Air Force is the most technologically advanced service in all of the Department of Defense. Whether the AF is called upon in the deserts of Saudi Arabia, the mountains of Bosnia, or along the flooded towns and cities along the Mississippi River, the Air Force continues to prove indispensable to America's needs. The unique skills, responsiveness, and capabilities are the foundation of Air Force projections of air and space power.

The combat success in DESERT SHIELD/DESERT STORM and the extraordinary six-month buildup of combat forces and infrastructure before actual hostilities between coalition forces and Iraq has been well documented. Indeed, numerous lessons have been learned from our experiences. The success of airpower as employed in the Gulf War will lead to under-planning for future conflicts; we made it look easier than it might actually have been. We had available an existing base structure with support by the government of Saudi Arabia that just happen to have an infrastructure in place tailored to our equipment. The six-month build-up was a plus also. We had use of port facilities, adequate fuel supplies, unopposed landings, and very little interdiction efforts against us. Giving these conditions as elements leading to our overwhelming success, we should not expect such conditions to avail themselves in future military operations.

To understand the Air Forces logistic system and what capabilities they bring to the fight we must first look at the principles governing these processes. The Air Force logistics process evolves from five underlying principles: responsiveness, sustainability, time-definite re-supply, and information integration. These principles are integrated to create a systematic process for providing seamless logistic support while minimizing the support footprint. The end result of applying these principles and using the process is effective logistical support.

Responsiveness is characterized by having the flexibility to provide a tailored response with personnel, equipment, and support at the right place in the proper quantity at the right time. Inherent in this principle is a properly prepared force, well trained, organized to achieve mission-essential tasks, and equipped with sufficient resources to accomplish the mission. Survivability is a critical element of projecting power. In its broadest sense, it includes protecting people, weapon systems, and support structure which is key in maintaining continuous logistical support to the force. Sustainability measures our ability to maintain support to all users throughout the theater for the duration of the operation. With our shrinking budgets, we are forced to reduce forwarddeployed inventories which has resulted in leadership embarking on rigorous, situational dependent, base support planning efforts. These plans measure what should be initially deployed with the force, brought over on a per request basis and items obtained locally. The ability to continue support throughout all operational phases relies heavily on personnel preparedness and assets drawn from a seamless support system. The air mobility system and its contribution to rapidly re-supply and relocating forces are Combat communications and other deployable exclusive to the Air Force.

communications systems provide the capability to expand the base information infrastructure. These capabilities allow smaller forward bases to draw information and resources form outside the theater of operation through systems such as Global Command and Control System (GCCS). *Time-definite re-supply* means delivery, immediate supply, and sustaining a deployed force when and where needed. By providing users with reliable, predictable mission-critical parts delivery, time-definite re-supply gives deployed commanders the confidence to reduce investment in stock inventories. This principle forms the basis for all re-supply in theater. When a commander requires an item, the system provides reach back to home station or nearest source and delivers it where it is needed. Information integration exploits advances in communications and information technology to enhance logistical support. Information fusion is the timely and accurate access and integration of data across logistics support agencies worldwide, providing reliable asset visibility and resource access to the warfighter. Information technology should be leveraged to improve command and control, which is key to making timely and accurate decisions.¹

The Air Force possesses all the necessary logistical capabilities to sustain the force in the field. It's philosophy calls for the needs of the deployed forces to be met through Reachback to the continental U.S. (CONUS), with sustainment beginning immediately upon arrival. The capabilities inherent in their logistics concept creates a system whereby the needs of the deployed force will be met by the responsiveness of the logistics pipeline in lieu of stocks of spares. The functional areas of logistics for the Air Force are numerous, going from supply, maintenance and transportation to engineer, weather and

other related services. For this study we will only focus on the basic supply, maintenance, and transportation functions.

Logistics support for the Air Force is termed as combat support and keeping in line with the Air Forces vision for the 21st Century of "Global Engagement", its logistic system is called Agile Combat support Agile Combat Support is directly supportive of Focused Logistics as set forth in Joint Vision 2010. To develop the Air Force role in achieving Joint Vision 2010, the Chief of Staff of the Air Force established his vision in Global Engagement ACS is a core competency of the USAF and includes the processes by which the Air Force (AF) creates, sustains, and protects all aerospace capabilities to accomplish mission objectives. A Vision for the 21st Century Air Force.² This vision establishes Agile Combat Support and Rapid Global Mobility as core competencies in enabling air and space power to contribute to Joint Force Commander objectives. development of these new concepts evolves in direct response to the unprecedented changes, increased uncertainty, and significant reductions in resources caused by the turbulent and unpredictable security environment and the revolutionary changes underway in the geopolitical and economic status of the United States, its allies, and potential adversaries. The Air Force is realigning its strategies and concepts to meet the challenges, and present itself as an Aerospace Expeditionary Force. While this response has influenced all areas of the Air Force, most of the challenges and new requirements place a heavy demand on support activities. One example is the changing nature of the threat, requiring multiple, simultaneous small-to-medium scale operations, at multiple locations worldwide, to support multiple and diverse geopolitical objectives. This requirement has resulted in the emergence of the Air Expeditionary Force (AEF) concept,

which places strong pressures on Agile Combat Support (ACS) activities and ultimately will require new ways of doing business and creating new or enhanced capabilities.

These capabilities can be gained only through a fundamentally redesigned USAF support system that is highly mobile, technologically superior, robust, responsive, flexible, and fully integrated with operations. The integrated process to achieve these new capabilities is Agile Combat Support. ACS Command and Control (C^2) is the thread that allows effective and seamless Agile Combat Support and Rapid Global Mobility. USAF ACS C^2 has the potential to be the force multiplier to achieve full spectrum support capability in a world of increasing requirements and decreasing resources.

USAF ACS includes the processes by which the Air Force (AF) creates, sustains, and protects all aerospace capabilities to accomplish mission objectives. In its simplest terms, ACS is the product of the processes that ready and prepare Aerospace Forces effectively for quick response, and sustain operational activity efficiently with the right resource, at the right place, at the right time, and for the right length of time. In its broadest sense, combat support is "the procurement, maintenance, distribution, and replacement of personnel and materiel." Joint definitions include warfighting terms: "The science of planning and carrying out the movement and maintenance of forces." Air Force combat support can be defined as those actions designed to field and support a specific military capability during peacetime, contingency operations, and major theater war. This concept of combat support is distinctly separate from the activities we label as operations. Operations are those functions that employ combat capabilities. For the Air Force, this means aircrew members, missile launch officers, etc., using their aircraft,

missiles, munitions, and other weapons systems to achieve military objectives. Combat support and operations together create combat capability.

All in all, the Air Force possesses the capabilities necessary to deploy the force, provide force sustainment and protection with very little logistical footprint due to it's rapid mobility and information system that serve as a value added. However, when in times of major mobilization and deployment of troops, competition for the valuable yet scarce air assets will create the situation where the system will no longer be responsive and time sensitive, thus a need for more assets in country.

While this ACS CONOPS addresses Agile Combat Support for employed Aerospace Forces in a deployed environment, this core competency also affects processes that are Continental United States (CONUS)-oriented or based and accomplish the organize, train, and equip functions. Specifically, to quote Air Force Basic Doctrine 1:

Importantly, although support to contingency operations is absolutely critical to our success as a force, agile combat support is not just a concept for deployed operations. Every facet of our Service must be focused on providing what ultimately is combat support, whether it is better educated warriors, better home-based support for members and their families, better methods to manage our personnel system, or more efficient processes to conduct business—those things that keep our people trained, motivated, and ready. Equally important to a technologically dependent Service like our own is agility—agility in our acquisition and modernization processes,....

Why is Agile Combat Support Needed?

The National Military Strategy has shifted to employ a wide spectrum of military capabilities required to support differing geopolitical objectives. *Joint Vision 2010* outlines the Department of Defense (DOD) Chairman's vision to replace the old combat support philosophy with one that will enable joint forces of the future to be more adaptive. Specifically it calls for combat support systems to be responsive, flexible, and

precise, and is embodied in the operational concept of *Focused Logistics*. The Air Force Vision of Global Engagement defines the way it will conduct business through its core competencies to meet the challenges set forth in Joint Vision 2010. Agile Combat Support is the core competency that establishes the role of the logistics and combat support communities in the Global Engagement philosophy. In its broadest sense, combat support is "the procurement, maintenance, distribution, and replacement of personnel and materiel." Joint definitions include warfighting terms: "The science of planning and carrying out the movement and maintenance of forces." Air Force combat support can be defined as those actions designed to field and support a specific military capability during peacetime, contingency operations, and major theater war. This concept of combat support is distinctly separate from the activities we label as operations. Operations are those functions that employ combat capabilities. For the Air Force, this means aircrew members, missile launch officers, etc., using their aircraft, missiles, munitions, and other weapons systems to achieve military objectives. Combat support and operations together create combat capability.

Notes

¹ Air Force Doctrine Document 40, Logistics, 1997.

² Air Force Doctrine Document 1, Air Force Basic Doctrine, Chapter 2, September 1997

US Marine Corps Logistics

The Marine Corps logistics doctrine is outlined in FMFM 4, Combat Service Support. Understanding Marine logistics doctrine, organization, operation and capabilities is key in understanding what the Marine Corps brings to the fight in terms of support. Marine Corps logistics doctrine consists of the seven principles of responsiveness, simplicity, flexibility, economy, attainability, sustainability and survivability.¹

Responsiveness is having the right item or support at the right place and at the right time. This is the paramount underlying principle of USMC logistics because without responsive support combat operations as well as operation other than war (OOTW) will be adversely affected. Next we have simplicity which avoids complexities in support and allows the customer to receive "one stop shopping." Flexibility is the ability to adapt the support structure to changes in the operation. This structure should be centrally controlled with decentralized execution to meet operational needs.² Economy provides support at least cost in terms of resources available and the necessary amount to accomplish the mission. This principle is clearly tied to the principle of war known as economy of force. Attainability provides the appropriate levels of supplies and services to begin combat operations (level of supplies). The inability to attain the necessary level

of support for any class of supply or service can jeopardize mission success and operations should not begin until the conditions of success are set. Sustainability gives us support throughout the operation which is the greatest challenge for the logistician. Due to its sophisticated logistical capability of the US Army and the US Navy's limited inland support capabilities, the US Army was assigned the executive agent responsibility to provide long term inland logistics support to the Marine Corps. Survivability is the capacity to prevail in the face of potential destruction. To survive, logistics units must incorporate the passive measures of dispersion and the active measures of establishment of a ground defense plan. This logistic principle is parallel to the principle of "security" in war.

"The US Marine Corps is a three-in-one Service in embryo. It has gained so much experience in combining land, sea, and air action that it forms a nucleus and a pattern for future development. Logically, it should be the basis for further progress in integration." B.H. Liddell Hart

The Marine Corps provides the nation with the world's premiere naval infantry. The Corps is not a second Army. To accomplish its mission, the Corps is organized into the Marine Air Ground Task Force (MAGTF) concept, not dissimilar to the Army's combined arms warfare, to tailor the right size force, with the right set of skills, to get the job done rapidly utilizing the appropriate level of force. Regardless of the size or capability required, each MAGTF is comprised of four basic parts: command element (CE) ground combat element (GCE), air combat element (ACE), and combat service support element (CSSE). We will concentrate on the capabilities of the CSSE for this study. A Marine Expeditionary Force (MEF) represents the full combat power of a MAGTF and typically consists of a Marine Expeditionary Unit that is special operation capable and provides force entry, air strike and close air support capabilities. The MEF

contains the major element of this MAGTF's logistics. The MEF, which is built around the Marine division, is capable of only supporting itself through its CSSE for only 60 days without re-supply. The forwardly deployed MEF; (MEF FWD) has only 30 days of supply. The FSSG provides logistics support for the MEF. The FSSG performs those functions that exceed the organic capabilities of the supported unit. The areas of support are supply, maintenance, motor transport, engineer, medical/dental, and landing support. However, even with this augmented capability, the Marine Corps logistics capability is unable to sustain prolonged continued operations.

Notes

¹ FMFM 4, Marine Corps Logistic Document, Combat Service Support, 1994.

² Ibid.

The Best Capable Service

The issue of a joint logistics management command is similar to the support organization created during the Gulf War. It was created and used by LTG(R) Pagonis and according to his book "Moving Mountains" there is still a glaring need within a theater of operations for one joint, overarching logistical organization. LTG Pagonis established an ad-hoc overarching logistical command during the gulf war because of the advantages of having a single point of contact for all resource management and contracting, especially in a host nation. LTG Pagonis further stated that the first job of the logistician is to capture the host-nation infrastructure and the only way to do that is to have an organization with a theater-wide vision who can determine whether the requested item can be obtained locally, or is sitting on a propositioned ship or is already in a nearby warehouse. LTG Pagonis felt there was a need for a logistical "Kingpin", someone who could assess the imperatives of each functional area and decide upon a solution that best supported the mission.

In today's environment of reduced budgets and declining resources, it is imperative that support duplication is reduced and Service parochialism eliminated. Each Service has different capabilities and each have concerns about sustainment, which require close coordination and attention. If there was a joint logistical command, it could lead to the

most prudent action for integrated support at the operational levels of war. A joint logistical command could allow the Combatant CINC to more completely meet his or her logistical support requirements in future contingency operations. Support systems must be looked at differently because support cannot continue to be provided as it has been in the past. Joint support and coordination is required for future operations. Operational plans and requirements drive the force structure for CSS units. CSS must be linked to the requirements identified in each theater by the Services. A Joint Logistical Command can tie together all Service components in the theater under a single logistical operator. With this, consolidation of Service requirements for joint logistical support of common supply items and the application of resources from all Services is the best method to meet theater contingency force needs.

Maybe the Theater Support Command (TSC) is the answer. The TSC is the Army's redesign that has the capability of developing a flexible and adaptable command structure for force projection and sustainment operations in a theater of operations. It is well grounded with its doctrinal basis in Joint Publication 4-0, Doctrine for Logistic Support of Joint Operations. This multifunctional organization of support functions provides a single command which has the responsibility to command and control support functions at EAC level. The TSC will serve as the Joint Force Commander's single point of contact for theater logistics functions. Although this is an Army organizational concept, the objective organization will provide a significant amount of support to other Services. Since the Army is already the executive agent for planning and providing a significant amount of common logistics support to joint forces, an Army officer should command the

TSC. However, in order to support other Services, the TSC will require staffing (joint) from the other Services.

The bottom line is that joint logistical organizations in support of contingency operations and joint task forces are most definitely the wave of the future. Whether they are fully joint or jointly staffed is still to be determined. The fact of the matter is that they will have a joint focus and will provide joint support. With them, as with any organization legitimately grounded in doctrine, will come a need for jointly focused and jointly trained logisticians who have hopefully been developed with a joint logistics perspective. These logisticians will be unbiased (Purple) military personnel from all the Services, united under sound leadership and practicing sound logistic doctrine, maintaining the focus of the theater logistics system, and providing operational direction to the component logistic commands.

Notes

¹ United States Army Combined Arms Support Command (CASCOM), Theater Support Command Draft Concept, 1996.

Conclusion

"Which Service is the best in providing joint logistics management?" Is the answer already given in the Army's TSC? In an environment of reduced budgets and declining resources, it is imperative that support duplication is reduced and Service parochialism eliminated. Each Service has different capabilities and each have concerns about sustainment, which require close coordination and attention. If there was a joint logistical command, it could lead to the most prudent action for integrated support at the operational levels of war. A joint logistical command could allow the Combatant CINC to more completely meet his or her logistical support requirements in future contingency operations. Support systems must be looked at differently because support cannot continue to be provided as it has been in the past. Joint support and coordination are required for future operations. Operational plans and requirements drive the force structure for CSS units. CSS must be linked to the requirements identified in each theater by the Services. A Joint Logistical Command can tie together all Service components in the theater under a single logistical operator. With this, consolidation of Service requirements for joint logistical support of common supply items and the application of resources from all Services is the best method to meet theater contingency force needs.

Appendix A

LOGISTICAL RESPONSIBILITIES OF THE THEATER COMMANDER

- -Coordination of supply support between the service components
- -Responsible for maintaining an effective distribution network throughout the theater
- -Responsible for provisions of supplies to civilians in occupied areas
- -Responsible for coordination of maintenance within the command
- -Responsible for coordinating salvage procedures within the command
- -Responsible for generel engineering and base development
- -Issue procurement guidance within the command
- -Responsible for coordination and integration of health service support within the command
- -Responsible for the search, recovery, identification, and evacuation or disposition of deceased personnel within their AOR
- -Responsible for the command, control and communicaion systems
- -Will identify materiels required for regional minimu, essential security assistance
- -Coordinate Host Nation Support

Appendix B

Classes and Subclasses of Supply

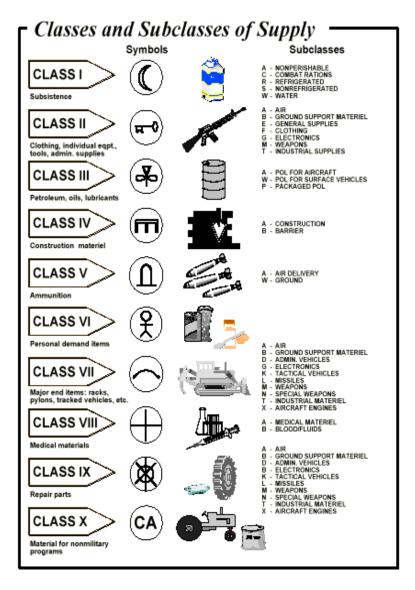


Figure 1 Classes and Subclasses of Supply

BIBLIOGRAPHY

Primary Sources:

Joint Pub 4-0. Doctrine for Logistic Support of Joint Operations. 1995.

Air Force Doctrine Document 40. AFDD-40 Logistics.

FM 100-5, Operations. Headquarters Department of the Army. 1993.

NAVSUP 485, Afloats Supply Procedures. 1989.

United States Army CASCOM Draft Concept Plan, Theater Support Command, 1996.

Secondary Sources:

1997 Navy International Logistics Symposium. "Expeditionary Logistics.

DA Pam 525-5, Chapter 3, Combat Service Support.

- 1997 Joint Forces Quarterly Magazine. "In Search of Focused Logistics" by LTG John J. Cusik, USA and LTC Donald C. Pipp, USAF.
- 1997 Joint Forces Quarterly Magazine. "What Exactly is Jointness?" by COL Lawrence B. Wilkerson, USA.
- 1996 Air Force Association. Air Force Chief Claims Major Role in Future Joint Missions.
- 1998 Air Force Association. "Agile Combat Support."
- 1997 US Army War College Quarterly. "21st Century Logistics: Joint Ties That Bind" by Stephen P. Ferris and David M. Keithly.

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